

## The *Laniarius* bushshrikes in Sierra Leone

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The genus *Laniarius* of African bushshrikes (Malaconotinae) is a group of generally sedentary and skulking birds of heavy shrubbery, all advertising their presence throughout the year by their loud, whistled calls, generically similar but specifically distinct. The genus has speciated in 3 main directions: birds all black, birds black with red/yellow breasts, and birds with white breasts (the white usually suffused with a pinkish or buffish wash). A representative of this last group is found over most of the lush vegetation belts (except high forest) of the Ethiopian region, with 4 main forms over which there is controversy whether they should be considered full species (e.g. Hall & Moreau 1970) or races of one widespread species (e.g. White 1962).

One distinctive form *L. turatii* (all black above, white, suffused pinkish buff below, differing from the neighbouring *L. aethiopicus major* which has white on the wings and a pinkish wash below) occupies the northwest corner of the group's distribution, in Guinea Bissau, Guinea, and western Sierra Leone. Writing of it Bannerman (1939) said "It is most important to discover whether their [*aethiopicus* and *turatii*] respective breeding ranges coincide or overlap". The purpose of this note is to plot the distribution of these and the other two *Laniarius* species (*L. barbarus* and *L. leucorhynchus*) which occur in Sierra Leone, to show that there is almost complete segregation and that where they do overlap each behaves as a good species.

The local race of *L. barbarus*, *L. b. helenae* (red breasted), is confined to the mangroves which clothe the tidal rivers and most of the coastline except for the southern strip, known from the northern border area south to Bonthe, hardly leaving the mangrove shelter even for the coastal thickets in the immediate vicinity. Though rarely seen, its clear double whistle is an easy indication of its abundance in this habitat.

*L. leucorhynchus* (all black) was collected in 1912 near Freetown and somewhere on the Little Scarcies river in the northwest (Bannerman 1939), but its range has contracted (possibly resulting from the increased cutting of the forest regrowth and the spread of savanna conditions) and today it occurs commonly only in thick, virtually impenetrable forest regrowth or 'bush' in the southeast, west to Pujehun and the neighbourhood of Bo and north to Kono district. Isolated populations still probably occur further west but it is certainly extremely uncommon and, for instance, on the Freetown Peninsula during 15 years I have recorded (heard and seen) a pair one season only and that in atypical habitat of secondary forest, higher, darker, and easier to walk through than any *Laniarius* territory known elsewhere in the forest zone of Sierra Leone. Again, far the best indication of presence is the call, most commonly a series of 6-7 "hoo"s, ringing, full-sounding and resonant, with grating answers or slower, more measured "hooo"s from the female.

*L. turatii* and *L. aethiopicus* divide the rest of the country between them, with altitude apparently the key to distribution here (though not elsewhere, *turatii* being found in the hills of Guinea and *aethiopicus* in lowland Ghana). Throughout the western lowlands, both in the moist wooded savanna of

the north and the forest regrowth of the south (but not in true forest), *turatii* occurs, a common and successful species, marginally overlapping with *leucorhynchus* both in terrain and habitat at Pujehun and north of Bo. On the higher ground of the eastern plateau, above 1000 ft. and including the plateaux of the true mountains at about 4000 ft, *aethiopicus* takes its place. Though found in the forest galleries on the mountains, it prefers more open country, and where geographically it overlaps with *leucorhynchus*, in Kono district, they are ecologically segregated, *aethiopicus* in savanna woodland, *leucorhynchus* in thick second growth.

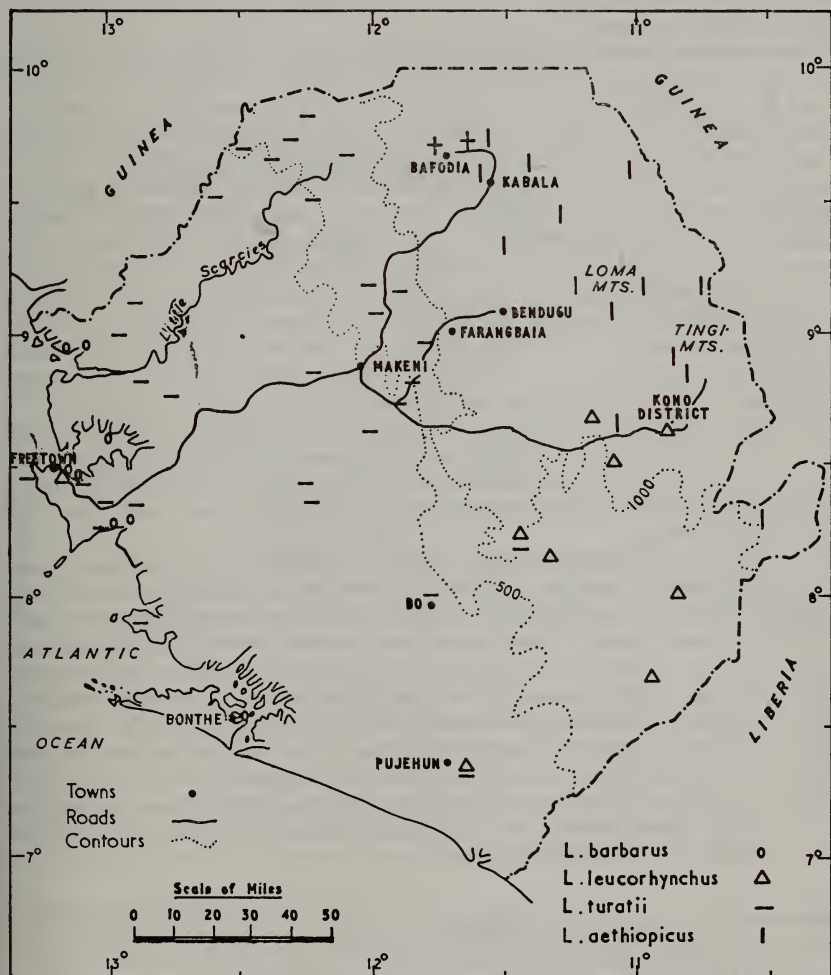


Fig. 1. Map of Sierra Leone, showing all places mentioned in the text, the approximate line of the abrupt escarpment between lowland and highland, and the distribution of *Lanianarius* species as known at the present time. Pre-1940 records are not shown, as the vegetation has changed so greatly as to render these largely obsolete. (Drawn by Mr. A. J. Elba.)

The dividing line between *turatii* and *aethiopicus* cannot be fixed with complete accuracy, principally for geographical reasons, the abrupt escarpment from lowlands to highlands in central Sierra Leone not being easy to work and the extreme north, by the Guinea border, being ornithologically *terra incognita*. In the south of the range of *aethiopicus* there appears to be a genuine gap westwards where neither species occurs. I have worked the forest/savanna mosaic country round Farangbaia and Bendugu fairly thoroughly with negative results. Similarly, in the wooded savanna along the northern stretch of the main Makeni-Kabala road there is a gap of 40 miles where neither species is known, though not every point along the road has been covered.

From Kabala, where *aethiopicus* is relatively common, the road goes north for 11 miles and then branches west for 15 miles to its end at Bafodia, 1100 ft. *L. aethiopicus* occurs all along this road and round Bafodia itself, its most westerly known station. A few miles east of Bafodia *turatii* also appears and there is at least a 6-7 mile stretch of east-west overlap (how far the north-south overlap continues is unknown), with no indication of interbreeding or distinction of habitat. I have seen a pair of each species meet by chance in the same tree with no sign of mutual interest or aggression, the pairs continuing on their own foraging paths, and regularly one species occurs on ground where previously I have seen the other. Voice remains equally constant and specifically recognisable: *turatii* gives a long, metallic, single whistle "whooooo", which may be repeated several times and to which the female answers with a grating "k k k kkk"; *aethiopicus* has rather more variation but typically gives a much more liquid, slow "hooo hooo hooo", sometimes lengthened to "hoo-oo hoo-oo", or a quicker and lighter "poo poo poo", the female answering with various "kk" noises, again more variable than the equivalent *turatii* sounds. Their habits (as with all *Laniarius*) are very similar, but *aethiopicus* is rather more likely to mount into trees and is thus easier to see.

Since there is no intergradation of forms, *L. aethiopicus* and *L. turatii* must have developed in isolation. The Bafodia area was until living memory well forested and there are still relict patches of forest and relict forest birds (e.g. *Eurystomus gularis*, *Ceratogymna elata*, *Ploceus tricolor*). Presumably the forest acted as a barrier separating the two. With its disappearance I suspect that *turatii* has pushed eastwards and, with the land rise here comparatively gentle compared with further south, has here, and here only, appeared above the 1000 ft contour. There is no indication as to which is the commoner species at Bafodia (my records suggest they are evenly balanced) but, just as in the south *turatii* seems to have taken advantage of the changing vegetation to push *leucorhynchus* eastwards during this century, so in the north it may possibly be in process of displacing *aethiopicus*.

#### References:

- Bannerman, D. A. 1939. *The Birds of Tropical West Africa*. Vol. 5. Crown Agents: London.  
 Hall, B. P. & Moreau, R. E. 1970. *An Atlas of Speciation in African Passerine Birds*. British Museum (Natural History): London.  
 White, C. M. N. 1962. *A Revised Check List of African Shrikes* . . . etc. Gov. Printer: Lusaka.

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